Waldo – Recreation Use EA

Appendices

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Appendix A: Recreation Opportunity Spectrum

The recreation opportunity spectrum (**ROS**) is a system of describing a variety of forest settings provided on National Forest lands. Beyond the typical activities that visitors pursue on public lands, research has shown that the setting for these activities matters a lot to visitors. For example, camping is a universally recognized activity for visitors on public lands.

However there is a dramatic contrast between camping within a developed campground next to a forest highway and camping next to a wilderness lake. While the activity is the same, the settings are different. The **ROS** system offers managers a tool for managing landscapes to effectively provide a range of recreation settings for visitors to experience.

There are six (*6*) major setting categories within the ROS system. These are: Urban, Rural, Roaded Natural, Semi-Primitive Motorized, Semi-Primitive Non-Motorized, and Primitive. And as the names imply they range from very developed and convenient (*Urban*) to very rustic and remote (*Primitive*).

The following descriptors are used to differentiate between categories and give agencies evaluation tools for monitoring the success of their efforts. Agency staff can also use these descriptors to guide decisions on site development proposals (*building a bridge, installing signs*). These descriptors can also help informed visitors to select forest settings that match with their expectations. These descriptors are:

> * **Access**
> * **Remoteness**
> ** ***Naturalness**
> * **Social Encounters**
> * **Visitor Impacts**
> * **Visitor Mgt**
> * **Facilities & Site Mgt**

In the tables below, the term "***Norm***" defines the typical state of conditions when a given setting is managed according national standards. The term "***Inconsistent***" highlights some incompatibility between ground conditions and standards for the setting. Often minor changes can be pursued to rectify these situations. Some situations are left inconsistent with national standards, because they meet local management objectives. Setting conditions that are deemed "***Fully Compatible***" easily meet or exceed the national standards. And finally when conditions fall into the "***Unacceptable***" range, significant management changes are necessary to bring the setting back into its desired state. In some cases where site changes are not possible to rectify unacceptable conditions, the agency may consider changing the allocation to fit actual ground conditions.

Access describes the type and mode of travel compatible within the each setting (*Table 1*). An urban or rural campground setting generally has full access for motor vehicles, whereas a primitive setting offers cross-country travel by foot or stock only.

Table 1: Access Criteria

	X-country Travel	Non-Motorized Trails	Motorized Trails and Primitive Roads	Single Lane Gravel Roads; High clearance Vehicles	Full Access by all vehicles
Primitive	Norm		Unacceptable		
Semi-Primitive Non-Motorized	Fully Compatible	Norm	Inconsistent	Unacceptable	
Semi-Primitive Motorized	Fully Compatible		Norm	Inconsistent	Unacceptable
Roaded Natural	Fully Compatible			Norm	
Rural	Fully Compatible				Norm
Urban	Fully Compatible				Norm

Remoteness defines the perception of being removed from the sights and sounds of human activities (*Table 2*). The more developed settings (*Urban, Rural, Roaded Natural*) place no value on remoteness, whereas Primitive settings should offer isolation (*1 ½ hour walking distance*) from human sights and sounds.

Table 2: Remoteness Criteria

	Out of Sight & Sound of Human Activity; More than 1 ½ mile walk	Distant Sight and Sound of Human Activity; More than ½ Mile Walk from any Motorized Roads	Distant Sight and Sound of Human Activity; More than ½ Mile Walk from Improved Roads	Remoteness of little Relevance	Remoteness of little Relevance
Primitive	Norm	Inconsistent	Unacceptable		
Semi-Primitive Non-Motorized	Fully Compatible	Norm	Inconsistent	Unacceptable	
Semi-Primitive Motorized	Fully Compatible		Norm	Inconsistent	Unacceptable
Roaded Natural	Fully Compatible			Norm	
Rural	Fully Compatible				Norm
Urban	Fully Compatible				Norm

Naturalness describes the physical conditions of the setting as compared to a natural environment (*Table 3*). This descriptor is primarily a visual evaluation of the surrounding landscape, and describes the level of human modifications. A primitive setting would display no significant human change from a natural forest setting. By contrast, visitors should expect lots of human-caused change to their surroundings in an urban or rural setting.

Table 3: Naturalness Criteria

	Preservation	Retention	Partial Retention	Modification	Maximum Modification
Primitive	Norm	Inconsistent	Unacceptable		
Semi-Primitive Non-Motorized	Fully Compatible	Norm	Inconsistent	Unacceptable	
Semi-Primitive Motorized	Fully Compatible		Norm	Inconsistent	Unacceptable
Roaded Natural	Fully Compatible	Norm			Inconsistent
Rural	Fully Compatible		Norm		
Urban	Fully Compatible				N/A

Preservation – Only natural changes to the visual landscape should be occurring.
Retention – Human-created change should mimic natural processes in size, shape, color, and texture.
Partial Retention – Human-created change can differ *(size, shape, color, texture)* from natural processes but must remain subordinate (*hidden or unnoticeable*) to the typical landscape features.
Modification – Human-created change should borrow from natural forms, colors, shapes and texture such that the change blends into the surrounding landscape features.
Maximum Modification – Human-caused change can dominate the surrounding landscape features, however they will appear as natural occurrences when viewed as background scenery.

Social Encounters tries to define the appropriate frequency of meeting others during the course of a day's activities (*Table 4*).   This really comes closest to describing a sense of solitude for the forest visitor. A lack of encounters with other visitors is not relevant to someone using a Rural or Urban setting, while someone seeking out a Primitive setting should expect few encounters (*6 or less per day*). Such encounters are most likely during travel on trail systems, but could also involve neighboring camps at popular destination sites (*lakes, open meadows, mountain tops*).

Table 4: Social Encounters Criteria

	6 or less Parties Met per Day; Less than 3 Campsites Visible	6-15 Parties per Day; 6 or less Campsites Visible	Mod. to High Contact on Roads; Mod. to Low Contact on Trails and in Campsites	Moderate to High Contact on Roads, Trails and Campsites	High Contacts on Roads, Trails, and in Campsites
Primitive	Norm	Inconsistent	Unacceptable		
Semi-Primitive Non-Motorized	Fully Compatible	Norm	Inconsistent	Unacceptable	
Semi-Primitive Motorized					
Roaded Natural	Fully Compatible		Norm	Inconsistent	Unacceptable
Rural	Fully Compatible			Norm	Inconsistent
Urban	Fully Compatible				Norm

Visitor Impacts describe the physical change that human use produces in the environment (*Table 5*). These criteria focus on "*how much change will be allowed and what tools for control are appropriate*" rather than "*how can impacts be prevented*". Physical change from visitors should include soil, vegetation, wildlife habitat and presence, and forms of pollution (*air, water and noise*).

Table 5: Visitor Impacts Criteria

	Unnoticeable Impacts, No Site Hardening	Subordinate Impacts, No Site Hardening	Subordinate Impacts, Limited Site Hardening	Subtle Site Hardening	Site Hardening May be Dominant, but in Harmony
Primitive	Norm	Inconsistent	Unacceptable		
Semi-Primitive Non-Motorized	Fully	Norm	Inconsistent	Unacceptable	
Semi-Primitive Motorized	Compatible		Norm	Inconsistent	Unacceptable
Roaded Natural	Fully Compatible			Norm	Inconsistent
Rural	Fully Compatible				Norm
Urban	Fully Compatible				Fully

Visitor Management focuses on the amount of regulation and control, plus the level of information and services, provided to visitors (*Table 6*). The more developed settings (*Urban, Rural and sometimes Roaded Natural*) offer sufficient regulation and services to provide the necessary level of visitor security. Whereas a Primitive setting lacks such management, thereby demanding independence, self-reliance, and a level of risk-taking from visitors.

Table 6: Visitor Management Criteria

	No On-Site Controls or Information Facilities	Subtle On-Site Controls & Limited Information Facilities	Noticeable On-Site Controls & Facilities, but Simple in Design	Obvious & Numerous On-Site Controls & Facilities, but Harmonize w/ Setting	Obvious & Numerous On-Site Controls & Facilities; Sophisticated in Design
Primitive	Norm	Inconsistent	Unacceptable		
Semi-Primitive Non-Motorized / **Semi-Primitive Motorized**	Fully Compatible	Norm	Inconsistent	Unacceptable	
Roaded Natural	Fully Compatible		Norm	Inconsistent	Unacceptable
Rural	Fully Compatible			Norm	Inconsistent
Urban	Fully Compatible				Norm

Facilities and Site Management refers to the level of site development (*Table 7*). Many visitors seek out a setting with convenience and comfort (*Urban, Rural*) with facilities for socializing. While others prefer no creature comforts (*Primitive*) or some state of facilities between these two conditions. A Primitive setting provides a sense of self-reliance and challenge not expected in more developed settings.

Table 7: Facilities and Site Management Criteria

	Few Rustic Facilities for Site Protection Only; Native Materials Only	More Rustic Facilities, Primarily for Site Protection; Native Materials Only	Rustic Facilities for User Comforts and Site Protection; Commonly Native Materials	Some Facilities can be more Complex for User Comforts; Materials vary but Harmonize with site	Most Facilities for User Comforts; Synthetic Materials are Common; Designs may be very Complex
Primitive	Norm	Inconsistent	Unacceptable		
Semi-Primitive Non-Motorized **Semi-Primitive Motorized**	Fully Compatible	Norm	Inconsistent	Unacceptable	
Roaded Natural	Fully Compatible		Norm	Inconsistent	Unacceptable
Rural	Fully Compatible			Norm	Inconsistent
Urban	Fully Compatible				Norm